THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte THOMAS SPRINGMANN

Appeal No. 96-1802 Application No. 08/060,922¹

ON BRIEF

Before McCANDLISH, <u>Senior Administrative Patent Judge</u>, STAAB and NASE, Administrative Patent Judges.

NASE, Administrative Patent Judge.

 $^{^{\}scriptscriptstyle 1}$ Application for patent filed May 13, 1993.

Application No. 08/060,922

DECISION ON APPEAL

This is an appeal from the refusal of the examiner to allow claims 2-4, 8-10 and 12, as amended subsequent to the final rejection. Claims 6 and 13 have been allowed. Claims 1, 5, 7 and 11 have been canceled.

We REVERSE and enter new rejections pursuant to 37 CFR $\$ 1.196(b).

Application No. 08/060,922

BACKGROUND

The appellant's invention relates to a gas sampling tube for flue-gas analysis. An understanding of the invention can be derived from a reading of exemplary claim 12, which appears in the appendix to the appellant's brief.

The prior art reference of record relied upon by the examiner in rejecting the appealed claims is:

Hölzl 5,039,322 Aug. 13, 1991

In addition, this panel of the Board will rely on admitted prior art as set forth on page 2, lines 8-17, of the appellant's specification.

Claims 2-4, 8-10 and 12 stand rejected under 35 U.S.C. § 103 as being unpatentable over Hölzl.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejection, we make reference to the examiner's answer (Paper

No. 16, mailed October 19, 1994) for the examiner's complete reasoning in support of the rejection, and to the appellant's brief (Paper No. 15, filed September 12, 1994) for the appellant's arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied prior art reference, and to the respective positions articulated by the appellant and the examiner. Upon evaluation of all the evidence before us, it is our conclusion that the evidence adduced by the examiner is insufficient to establish a prima_facie case of obviousness with respect to the claims under appeal. Accordingly, we will not sustain the examiner's rejection of claims 2-4, 8-10 and 12 under 35 U.S.C.

§ 103. Our reasoning for this determination follows.

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a <u>prima facie</u> case of obviousness. <u>See In re Rijckaert</u>, 9 F.3d 1531, 1532, 28

USPQ2d 1955, 1956 (Fed. Cir. 1993). A <u>prima facie</u> case of obviousness is established by presenting evidence that the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed combination or other modification. See <u>In re Lintner</u>, 9 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). Furthermore, the conclusion that the claimed subject matter is <u>prima facie</u> obvious must be supported by evidence, as shown by some objective teaching in the prior art or by knowledge generally available to one of ordinary skill in the art that would have led that individual to combine the relevant teachings of the references to arrive at the claimed invention. <u>See In re Fine</u>, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Rejections based on

§ 103 must rest on a factual basis with these facts being interpreted without hindsight reconstruction of the invention from the prior art. The examiner may not, because of doubt that the invention is patentable, resort to speculation, unfounded assumption or hindsight reconstruction to supply deficiencies in the factual basis for the rejection. See In

<u>re Warner</u>, 379 F.2d 1011, 1017, 154 USPQ 173, 177 (CCPA 1967), <u>cert. denied</u>, 389 U.S. 1057 (1968).

With this as background, we turn to the rejection of the only independent claim on appeal (i.e., claim 12).

The examiner determined (answer, pp. 4-5) that

[i]t would have been obvious to one having ordinary skill in the art at the time the invention was made to modified [sic] the location of the filter element as claimed.

The appellant argues (brief, pp. 8-12) that the subject matter of claim 12 would not have been suggested by the teachings of Hölzl. We agree. In that regard, we see no evidence, as shown by some objective teaching in the prior art or by knowledge generally available to one of ordinary skill in the art, that would have suggested to one of ordinary skill in the art at the time the invention was made to provide a single heater extending substantially the length of the filter element and the measured gas line (i.e., a line downstream of the filter element). Instead, it appears to us that the examiner relied on impermissible hindsight in reaching the

determination that the claimed subject matter of claim 12 would have been obvious to one of ordinary skill in the art.

Since all the limitations are not taught or suggested by the applied prior art, we will not sustain the 35 U.S.C. § 103 rejection of independent claim 12, and of dependent claims 2-4 and 8-10.

New grounds of rejection

Under the provisions of 37 CFR § 1.196(b), we enter the following new grounds of rejection.

Claims 9 and 10 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the appellants regard as the invention. Claim 9 is indefinite since there is no proper antecedent basis for "said insulating layer." An insulating layer is recited in claim 8 but claim 9 is dependent directly from independent claim 12. Thus, the metes and bounds of claim 9 and claim 10 dependent thereon are unclear.

Claims 2-4 and 12 are rejected under 35 U.S.C. § 103 as being unpatentable over the admitted prior art in view of $H\ddot{o}l_{z}l_{z}^{2}$

The admitted prior art (as set forth on page 2, lines 817, of the appellant's specification) comprises a gas sampling
tube for flue-gas analysis having a gas inlet constructed and
adapted to receive a flue-gas sample; an elongate filter
element downstream of the gas inlet and in fluid communication
with the gas inlet for normally receiving gas from the gas
inlet; a measured gas line downstream of the filter element
and in fluid communication with the filter element for

² Claim 8 has not been included in this rejection since the applied prior art does not suggest the single heater being of tubular configuration. The examiner should ensure that this claimed feature is illustrated in the drawings as required by 37 CFR § 1.83 since the current figure illustrates a single heater being of a coiled configuration. Claims 9 and 10 have not been included in this rejection since normally, when substantial confusion exists as to the interpretation of a claim and no reasonably definite meaning can be ascribed to the terms in a claim, a determination as to patentability under 35 U.S.C. § 103 is not made. See In re Steele, 305 F.2d 859, 134 USPQ 292 (CCPA 1962) and In re Wilson, 424 F.2d 1382, 165 USPO 494 (CCPA 1970).

normally receiving gas from the filter element; a gas outlet downstream of the measured gas line; a heating coil around the filter element for heating the filter element; and a heater about the measured gas line for heating the measured gas line. The heating coil around the filter element and the heater about the measured gas line are provided as separate units, each with its own heating system.

Hölzl discloses an apparatus for extracting hot gas samples from a reaction vessel. As shown in Figures 1-2, the apparatus includes a gas inlet (Hölzl's extraction probe 1 having inner tube 4); an elongate filter element downstream of the gas inlet and in fluid communication with the gas inlet for normally receiving gas from the gas inlet (Hölzl's filter 2 having a filter plug 6 and a filter cup/housing 3); a measured gas line downstream of the filter element and in fluid communication with the filter element for normally receiving gas from the filter element (Hölzl's gas delivery line 18); and a gas outlet downstream of the measured gas line (the outlet of Hölzl's gas delivery line 18). Hölzl teaches

(column 4, lines 48-50) that the probe 1 (i.e., the gas inlet) and the filter 2 may be heated by separate heating coils or by a common heating coil.

After the scope and content of the prior art are determined, the differences between the prior art and the claims at issue are to be ascertained. Graham v. John Deere Co., 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966).

Based on our analysis and review of the admitted prior art and claims 2-4 and 12, it is our opinion that the only difference is the limitation that a single heater extends substantially the length of the filter element and the measured gas line.

In applying the above-noted test for obviousness, we reach the conclusion that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the two separate heating systems of the admitted prior art to be a single heating system especially in view of Hölzl's teaching that it was known in the art to use

either separate heating coils or a common heating coil to heat the filter and the gas inlet. In our opinion, one skilled in the art would have recognized the self evident advantages of utilizing a single heating system in place of two heating system (e.g., less expensive, a simpler design, etc.).

CONCLUSION

To summarize, the decision of the examiner to reject claims 2-4, 8-10 and 12 under 35 U.S.C. § 103 is reversed; a new rejection of claims 9 and 10 under 35 U.S.C. § 112, second paragraph, has been added pursuant to provisions of 37 CFR § 1.196(b); and a new rejection of claims 2-4 and 12 under 35 U.S.C. § 103 has been added pursuant to provisions of 37 CFR

§ 1.196(b).

This decision contains new grounds of rejection pursuant to 37 CFR § 1.196(b)(amended effective Dec. 1, 1997, by final rule notice, 62 Fed. Reg. 53131, 53197 (Oct. 10, 1997), 1203 Off. Gaz. Pat. Office 63, 122 (Oct. 21, 1997)). 37 CFR §

1.196(b) provides that, "A new ground of rejection shall not be considered final for purposes of judicial review."

37 CFR § 1.196(b) also provides that the appellant,

WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise
one of the following two options with respect to the new
ground of rejection to avoid termination of proceedings

(§ 1.197(c)) as to the rejected claims:

- (1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner. . . .
- (2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record. . . .

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR $\S 1.136(a)$.

REVERSED; 37 CFR § 1.196(b)

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APPEAL NO. 96-1802 - JUDGE NASE APPLICATION NO. 08/060,922

APJ NASE

SAPJ McCANDLISH

APJ STAAB

DECISION: REVERSED;

37 CFR § 1.196(b)

Prepared By: Gloria Henderson

DRAFT TYPED: 04 Nov 98

FINAL TYPED: